

# Clermont County Water Resources Department

## Standard Specification and Standard Drawing Revisions – Effective February 14, 2011

January 4, 2011

To whom it may concern:

Recently, the Clermont County Water Resources Department reviewed and revised the standard specifications and drawings that govern the construction of water and sewer utilities. For the most part, the specifications and drawings did not change significantly. Copies of the revised specifications and drawings are available for review on the CCWRD website at:

<http://wrd.clermontcountyohio.gov/DevInfo.aspx>

The following is a list of some of the most significant changes to the specifications and drawings:

1. Specification format – While the overall technical requirements of most of the specifications did not change, the overall format did. All specifications are now broken into six (6) parts, which include the following:
  - a) Part 1 – General
  - b) Part 2 – Products
  - c) Part 3 – Submittals
  - d) Part 4 – Execution
  - e) Part 5 – Testing
  - f) Part 6 – Basis of Payment (applicable to County bid projects)
2. Keyblock Anchors, Specification Section 1180 and Standard Drawing G1.1 have been modified to require the anchors to extend 12" into undisturbed earth on the bottom and both sides of the trench.
3. Jack and Bore with Steel Casing, Specification Section 1190, has been modified to require restrained joints on all pressure pipe (water mains, force mains) within steel casings. In addition to Cascade Spacers and End Seals, BWM Spacers and End Seals are also approved.
4. Granular Bedding and Initial Backfill Material, Specification Section 1200 and Standard Drawings W5.1 and S2.1 have been modified to require 6' long compacted clay bulkheads to be installed around the pipe every 100'. The bulkheads are required to resist the movement of groundwater through the granular material and erosion of the granular material.
5. Aggregate Backfill and Base Material, Specification Section 1220 – where CDF is not required as backfill under roadways, driveways, parking lots, or other paved surfaces, the Contractor will be required to use compacted stone meeting the material requirements of ODOT 304. Standard Drawings W5.1 and S2.1 have also been modified to reflect this change.
6. Sanitary Sewer Laterals, Gravity Sewer, Specification Section 3140 and Standard Drawing 3.1 have been modified to allow only factory made in-line wye branches or "Inserta Tee" fittings for connecting to existing sewer mains. Glue-on or Strap-on saddles will not be permitted.

7. Sanitary Sewer Service Connection, Residential Building, Specification 3141 and Standard Drawing S4.2, have been modified to permit any of the following materials for the 4" building sewer: Schedule 40, SDR 35, or SDR 26 PVC.
8. Sanitary Sewer Service Connection, Commercial Building, Specification 3142 and Standard Drawing S4.1, have been modified to permit any of the following materials for the 6" building sewer: Schedule 40, SDR 35, or SDR 26 PVC.
9. Force Main Discharge Manhole, Specification Section 3350, is a new specification that is applicable to all manholes (new or existing) that will receive direct discharge from a sanitary force main. The specifications require the manhole to be lined with a corrosion resistant epoxy liner. The specification also identifies the design requirements and locations for the force main discharge within the manhole.
10. Doghouse Style Manhole, Specification Section 3520, is a new specification that is applicable to doghouse style manholes installed where a new sewer main connects to an existing and installation of a precast manhole base is not possible.
11. Creek Crossing, Aerial Type and Support Pier, Standard Drawings S2.3 and S2.4 have been modified to eliminate the piers from within the stream channel and require steel casing in lieu of ductile iron pipe across the open channel. The drawing has also been modified to be a MINIMUM standard only. Since each stream crossing is unique, each will be designed by a Professional Engineer and submitted to the County for Review and Approval.
12. Standard Drawings S6.1 through S6.6 have also been included as Standard Drawings for Septic Tank Effluent Pump (STEP) and Small Diameter Gravity (SDG) wastewater collection systems. Please note, design and approval of these alternative collection systems will be subject to the approval of the Clermont County Water Resources Department and are intended to be used as means to serve existing homes with existing septic systems, where otherwise, public sanitary sewer would not be available.

Please review all of the new Specifications and Standard Drawings and provide any comments, in writing, to:

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Or email comments to: [lbloom@co.clermont.oh.us](mailto:lbloom@co.clermont.oh.us)

**The final version of the revised specifications and drawings will become effective on Monday, February 14, 2011.**

Thank you,

Lyle G. Bloom, P.E.  
Sanitary Engineer